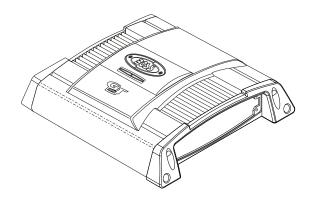


## Service Manual



## MODEL: GT1080

## SPECIFICATIONS

Maximum power output (2 Ohms): 800W x 2ch RMS power Output: 300W x 2ch Bridged Power Output: 1600W x 1ch Frequency response: 9Hz - 50KHz S/N Ratio: 103dB Low Pass Crossover (Variable) 45Hz - 90Hz High Pass Crossover (Fixed) 150Hz Bass Boost (Variable) 0 - +18dB Power Source Voltage: 14.4V Ground: Negative External dimensions: 236(W)x55(H)x504(D)mm

# To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them. The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring. For proper circuit construction, use of insulation tubes, bonding, gaps to PCB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection. If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair. Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots. If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile. Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

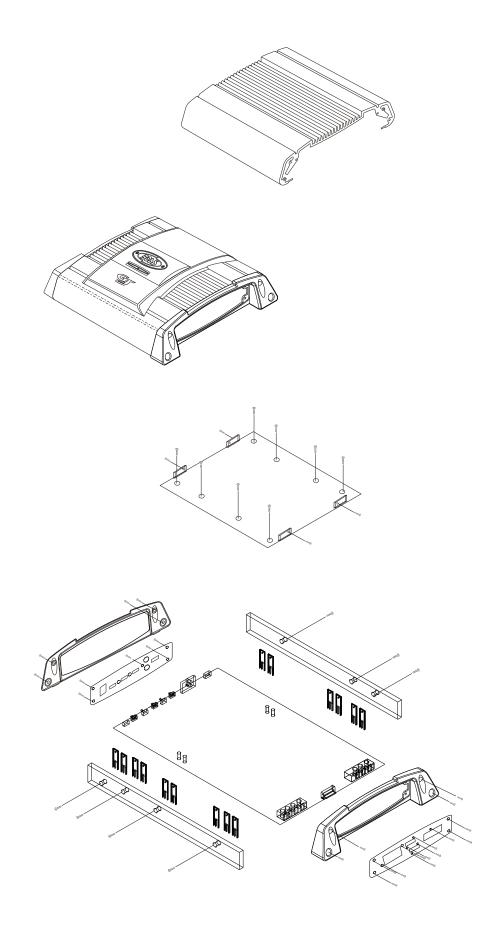
Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

6. Cautions in handling flexible PCB

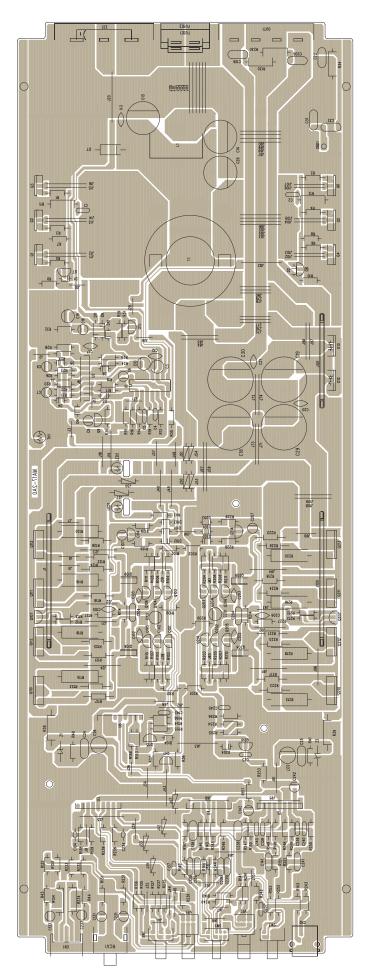
Before working with a soldering iron, make sure that the iron tip temperature is around 270... Take care not to apply the iron tip repeatedly(more than three times) to the same patterns. Also take care not to apply the tip with force.

7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

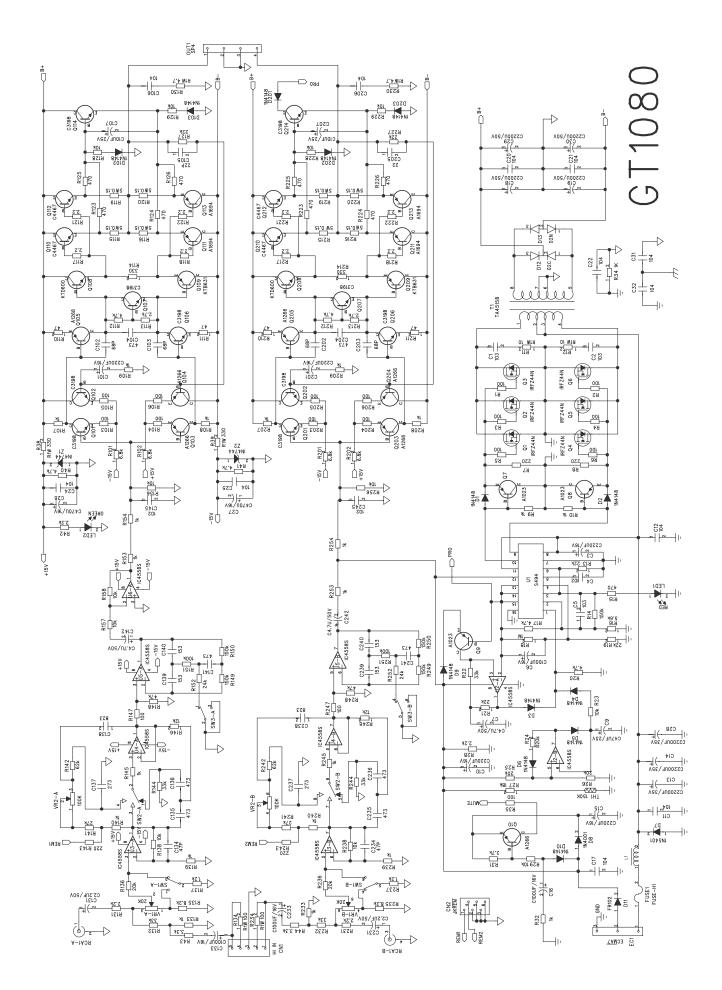
#### EXPLODED VIEW



#### PRINTED CIRCUIT BOARD - 1



#### **CIRCUIT DIAGRAM 1**



### PARTS LIST - 1

Part Number	desc	Location	qty
CR-00290X0-V0S00	RCA Jack	RCA1	1
CT-SOCKET0-3MA22	Power Terminal		1
CT-SOCKET0-4MA22	Speaker Terminal		1
CW-50000X0-H0025	High Input Jack	CN1	1
EC-C4104X0-Z6769	C Cap 0.1(Z)	C11,12,17,20,21	5
EC-C4220X0-D5050	C Cap 22PF(D)	C105,205	2
EC-C4680X0-J5050	C Cap 68PF(J)	C102,103,202,203	4
EC-E2107X0-M50A1	E Cap 100UF/16	C6,16,133,233	4
EC-E2227X0-M63A1	E Cap 220UF/16	C3,10,15,101,201	5
EC-E2477X0-MA0A3	E Cap 470UF/16	C26,27	2
EC-E3106X0-M50A1	E Cap 10UF/25V	C8,107,207	3
EC-E3476X0-M50A1	E Cap 47UF/25	C9	1
EC-E4225X0-M50A1	E Cap 2.2UF/50	C131,231	2
EC-E4228X0-MA8B5	E Cap 2200/50V	C18,19,29,30	4
EC-E4475X0-M50A1	E Cap 4.7UF/50	C7,142,242	3
EC-E6228X0-MA3B5	E Cap 2200/35V	C13,14,28	3
EC-M5102X0-J5590	Mylar Cap 0.001	C4,23,145,245	4
EC-M5103X0-J5590	Mylar Cap 0.01	C1,2,5	3
EC-M5104X0-JA0A3	Mylar Cap 0.1	C22,24,25,106,206,31,32	7
EC-M5153X0-J5785	Mylar Cap 0.015	C139,140,239,240	4
EC-M5273X0-J66A1	Mylar Cap 0.027	C137,237	2
EC-M5473X0-J80A1	Mylar Cap 0.047	C104,135,136,141,204,236,241,235	8
EC-M5823X0-K0000	Mylar Cap 0.082J	C138,238	2
EC-R5470X0-Z1435	Tubular Cap 47P	C134,234	2
ED-R2502C0-H0000	Diode ESAC25-02C	D12	1
ED-R2502N0-H0000	Diode ESAC25-02N	D13	1
ED-R4001X0-H0000	Diode IN-4001	D8	1
ED-R5401X0-H0000	Diode IN-5401	D7	1
ED-RFR1020-H0000	Diode FR102	D11	1
ED-S4148X0-H0000	Diode IN-4148	D1~6,9,10,101~104,201~204	16
ED-Z15VXX0-H4744	ZENER IN4744	Z1,2	2
EE-R225X70-76002	LED Red 2.5X7MM		1
EE-R525X70-76002	LED Green 2.5X7MM		1
EO-CMA5280-H0023	Coil	L1	1
EO-IMA528N-VXXX6	Tansformer	T1	1

Part Number	desc	Location	qty
ER-OG000X0-H2526	Resistor 0 1/4W	J33,35,42,47,51,53,50,54,27,30	10
ER-OG022X0-H2526	Resistor 2.2 1/4W	R117,118,121,122,217,218,221,222	8
ER-OG047X0-HA04C	Resistor 4.7 1W	R130,230	2
ER-OG100X0-HA04C	Resistor 10 1W	R11,12	2
ER-OG101X0-H2526	Resistor 100 1/4W	R1~6,35,103,~106,147,203~206,247	17
ER-OG101X0-HA04C	Resistor 100 1W	R134,234	2
ER-OG102X0-H2526	Resistor 1K 1/4W	R9,10,32,107~109,133,139,140,145,153,154,	21
		207~209,233,239,240,245,253,254	
ER-OG102X0-HA04C	Resistor 1K 1W	R34	1
ER-OG103X0-H2526	Resistor 10K 1/4W	R23,29,30,128,129,138,156,158,228,229,238,256,157	13
ER-OG104X0-H2526	Resistor 100K 1/4W	R36,151,251	3
ER-OG105X0-H2526	Resistor 1M 1/4W	R18	1
ER-OG122X0-H2526	Resistor 1.2K 1/4W	R137,237	2
ER-OG123X0-H2526	Resistor 12K 1/4W	R146,246	2
ER-OG154X0-H2526	Resistor 150K 1/4W	R14,149,150,249,250	5
ER-OG183X0-H2526	Resistor 18K 1/4W	R27	1
ER-OG203X0-H2526	Resistor 20K 1/4W	R25,26,136,236	4
ER-OG221X0-H2526	Resistor 220 1/4W	R7,8,143,243	4
ER-OG222X0-H2526	Resistor 2.2K 1/4W	R28,42,131,231	4
ER-OG223X0-H2526	Resistor 22K 1/4W	R13,19,21,127,227	5
ER-OG243X0-H2526	Resistor 24K 1/4W	R152,252	2
ER-OG272X0-H2526	Resistor 2.7K 1/4W	R31,113,213	3
ER-OG273X0-H2526	Resistor 27K 1/4W	R141,241	2
ER-OG331X0-H2526	Resistor 330 1/4W	R114,214	2
ER-OG331X0-HB05F	Resistor 330 2W	R38,39	2
ER-OG332X0-H2526	Resistor 3.3K 1/4W	R43,44	2
ER-OG333X0-H2526	Resistor 33K 1/4W	R22,144,244,132,232	5
ER-OG470X0-H2526	Resistor 47 1/4W	R110,111,210,211	4
ER-OG471X0-H2526	Resistor 470 1/4W	R15,123~126,223,224,226,225	9
ER-OG472X0-H2526	Resistor 4.7K 1/4W	R17,20,40,41,112,212	6
ER-OG473X0-H2526	Resistor 47K 1/4W	R148,155,248,255	4
ER-OG474X0-H2526	Resistor 470K 1/4W	R37	1
ER-OG562X0-H2526	Resistor 5.6K 1/4W	R16	1
ER-OG623X0-H2526	Resistor 62K 1/4W	R142,242	2
ER-OG682X0-H2526	Resistor 6.8K 1/4W	R101,102,201,202	4

Part Number	desc	Location	qty
ER-OG824X0-H2526	Resistor 820K 1/4W	R24	1
ER-WG.15X0-HXXXX	Resistor 0.15 5W	R115,116,119,120,215,216,219,220	8
ES-S2219X0-H0006	Switch JSS2219	SW1,3	2
ES-S23D29X-V0098	Switch SK23D39	SW2	1
ET-C1023X0-PY000	Transistor KTA1023-Y	Q7~9	3
ET-C1027X0-NY000	Transistor KTC1027-Y	Q41	1
ET-C1266X0-PY000	Transistor A1266Y	Q10,103~105,203~205	7
ET-C1302K0-N0000	Transistor KTD-1302	Q115,215	2
ET-C1694X0-PY000	Transistor 2SA1694	Q111,113,211,213	4
ET-C3198K0-NY000	Transistor KTC3198-Y	Q101,102,106,107,114,201,202,206,207,214	10
ET-C4467X0-NY000	Transistor 2SC4467	Q110,112,210,212	4
ET-CB631X0-P0000	Transistor KTB631-KY	Q109,209	2
ET-CD600X0-N0000	Transistor KTD600-KY	Q108,208	2
ET-FFZ48N0-X0000	Mosfet IRFZ 48N	Q1-6	6
EW-CS06XX0-05AA0	Bare Wire 6MM	J41,4,26	3
EW-CS08XX0-05AA0	Bare Wire 8MM	J67,58,70,2,10,28,36,31,3	9
EW-CS10XX0-05AA0	Bare Wire 10MM	J9,29,44,46,62,66,38,39,60,61,5,6,7,48,32,56,99	17
EW-CS12XX0-05AA0	Bare Wire 12MM	J17,49,37	3
EW-CS15XX0-05AA0	Bare Wire 15MM	J102~107,75,76,80	21
EW-CS18XX0-05AA0	Bare Wire 18MM	J94,91,24,23,43,40,45,109,96,64,97,65,98,108	14
EW-CS20XX0-05AA0	Bare Wire 20MM	J95,68,63,19,11,12,15,16,13,14,72,74,71,73,	23
		73,83,87,82,84,85,86,88,89,90	
EW-CS22XX0-05AA0	Bare Wire 22MM	J25,8	2
EW-CS24XX0-05AA0	Bare Wire 24MM	J57,59	2
EW-CS25XX0-05AA0	Bare Wire 25MM	J20,110~115	7
II-4558LX0-V0008	IC NJM4558L	U2~6	5
II-494P0X0-H0016	IC KIA-494AP	U1	1
VR-BN104X0-V0A26	VR 100KB T12	VR2	1
VR-BN203X0-V0A26	<b>VR</b> 20KB T12	VR1	1